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JAPANESE TRADE STUDIES

Special Industry Analysis  
No. 6

RICE

Prepared for the  
Foreign Economic Administration  
by  
William J. Kurtz  
A member of the Staff of the  
United States Tariff Commission

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## FOREWORD

This is one of a series of Special Industry Analyses discussing from a commodity or individual industry viewpoint the outstanding items entering into the trade of Japan proper with its Empire and with foreign countries. These analyses are a part of a larger project which includes compilations (annotated) of the imports and exports of Japan proper by sources and destinations; surveys of certain of the colonial areas, emphasizing their Empire and foreign trade and post-war problems relating thereto; an over-all study of the trade of Japan proper; and a survey of Japan's shipbuilding industry and shipping services and requirements in the pre-war period. In all of the studies Manchuria has been included as an Empire area owing to the political, economic, and military dominance of Japan in that area, especially during the last decade.

Most of the data in these analyses were taken from official and semiofficial Japanese sources. Not only have errors and inconsistencies frequently been detected within individual volumes, but many data from different sources supposedly reporting on the same subject are irreconcilable. It is very likely that large shipments of goods reportedly moving to Kwantung from Japan have been in large part merely transshipments destined for Manchuria. In addition, the data probably exclude large shipments of commodities made to and from Empire areas for military purposes.

The present report is one of a number which were prepared during 1944 and 1945 for the Foreign Economic Administration by members of the staff of the United States Tariff Commission. Owing to the desire of the Foreign Economic Administration to obtain this material as promptly as possible, the reports were not reviewed by the Tariff Commission. All statements of fact or opinion in these reports are attributable to the individual staff members who prepared them. The reports were originally intended for confidential use of Government agencies, but are now being made public with the consent of the Foreign Economic Administration.

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## RICE

Introduction and summary

Rice is Japan's <sup>1/</sup> main food staple and one of its most valuable products. Total annual consumption in Japan proper during 1936-39 was 24-25 billion pounds; approximately 95 percent of this amount was used as food, including 5 percent made into sake and other beverages. During the same period, average production was 21 billion pounds <sup>2/</sup> (9 percent of world production) valued at 2.2 billion yen (about 625 million dollars); only China and British India produced more. Such large production required intensive cultivation of all available rice land (more than one-half of the arable land), which was made to yield an average of 78 bushels to the acre, compared with a world average of 37 bushels. Despite its productive efforts, Japan found it necessary to import rice; in 1933-37 it imported annually between 3 and 4 billion pounds (14-15 percent of total consumption) valued at about 320 million yen (more than 91 million dollars), or 10 percent of the value of all imports into Japan proper. In 1938, imports were valued at 426.5 million yen (121 million dollars).

From 1933 to 1939, as a result of the acceleration of the Empire self-sufficiency program, the difference between domestic production and consumption was supplied almost entirely by imports from Korea and Formosa. Manchuria has not been an exporter of rice, although its production of rough rice averaged 1.3 billion pounds during 1936-38. The Mandated Islands have been on an import basis, but are not significant in the total rice picture.

Japan proper has almost reached its optimum rice production and after the war will not be able to expand its output substantially. If total consumption of rice increases at its pre-war rate and if consumption of more costly imported foodstuffs decreases, as it probably will with any extensive reduction in the amount of foreign exchange available to Japan, the rice deficit will be even greater than before the war. Probably about 20 percent (5-6 billion pounds) of Japan's rice consumption in the post-war period will have to be supplied by imports.

The Japanese have shown a definite preference for the varieties of rice which they have developed in Korea and Formosa, and these areas may continue as important suppliers. However, without being economically coerced to export to Japan as they were before the war, Korea and Formosa would consume a greater portion of their own production. Therefore, Japan may have to depend upon French Indochina and Thailand for an increasing proportion of its imports, even though the type of rice produced there is less to the liking of the Japanese.

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<sup>1/</sup> Throughout this study the term Japan includes Japan proper and Karafuto.

<sup>2/</sup> Unless otherwise noted, all figures for rice are in terms of cleaned rice.



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Description and uses.

In Japan, the bulk of the rice crop is milled for human consumption. A small part (1 to 2 percent of the rough or paddy rice) is used for seed, about 5 percent is used in the production of sake and other liquors, and a small amount is used for feed. Some starch, usually made from the lower grades of rice, is used in the textile industry. In Japan, rice is consumed as food in various stages of milling from brown rice (rough rice with hulls off) to polished rice. The annual consumption of rice per capita is about 340 pounds; millet and barley are commonly used as substitutes for rice. Rice is generally boiled or steamed and is eaten shortly after preparation. The Japanese prefer the round-grained and relatively nonvitreous varieties, which are grown largely in Japan proper. The rice grown in California is similar to that grown in Japan.

Summary of pre-war supply.

The annual average production of rice in Japan proper increased from 19,007 million pounds in 1928-32 to 19,714 million pounds in 1933-37; during the same period, total imports increased about the same amount, from 3,323 million pounds to 3,912 million pounds. Exports, which have been relatively small, decreased from an annual average of 177 million pounds in 1928-32 to 112 million pounds in 1933-37. The annual average consumption per capita, however, virtually remained constant (about 340 pounds) during these periods, a fact which indicates that the increase in total consumption was due to the growing population of Japan proper (see table 1).

Nature of productive process.

In Japan, about 38 percent of the land suitable for growing rice is double-cropped, compared with 20 percent for all arable land. Two crops of rice in 1 year on the same land are possible only in small coastal areas in southeast Shikoku and Honshu. In other areas the second crop is generally some other grain.

The rice is planted in seedbeds in the spring, and when the seedlings are between 1 and 2 feet in height they are transplanted in fields flooded with 2 to 4 inches of water. With the exception of short periods when the water is removed for weeding, the land is kept under 6 to 8 inches of water until a short time before harvest. Harvest begins in August and continues through December. Modern machinery is little used in harvesting and threshing. The grain is cut by hand and is threshed by animals or human beings treading the grains, or by the use of flails.

Table 1.- Rice (in terms of milled rice): Production, imports, exports, and consumption, in Japan proper, annually 1928-39, average, 1928-32 and 1933-37

Year	Production	Imports				Exports			Apparent consumption	
		From Empire areas 1/		Other	Total	To empire areas 2/	Other	Total	Total	Per capita
		Korea	Formosa							
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Pounds
1928	18,945	2,022	657	575	3,254	3/ 37	4/ 10	47	22,152	358
1929	18,763	1,667	597	406	2,670	3/ 86	4/ 9	95	21,338	339
1930	21,009	1,470	600	397	2,467	3/ 78	4/ 98	176	23,300	362
1931	17,346	2,579	833	278	3,690	3/ 48	4/ 370	416	20,619	315
1932	18,972	2,130	1,067	337	4,534	3/ 54	4/ 94	148	23,358	352
Average, 1928-32	19,007	1,974	751	398	3,323	3/ 61	4/ 116	177	22,153	345
1933	22,251	2,246	1,100	315	3,661	30	32	62	25,850	385
1934	16,286	2,804	1,473	15	4,292	59	126	185	20,393	299
1935	18,050	2,531	1,246	86	3,863	90	62	152	21,761	314
1936	21,146	2,533	1,391	121	4,045	62	20	82	25,109	357
1937	20,835	2,238	1,391	73	3,702	62	15	77	24,460	343
Average, 1933-37	19,714	2,470	1,320	122	3,912	61	51	112	23,514	340
1938	20,693	2,467	1,312	51	3,820	5/ 34	4/ 12	46	24,483	339
1939	21,665	6/	6/	97	2,963	5/ 122	4/ 31	7/	7/	7/

1/ Represents exports reported from country of origin rather than imports recorded by Japan. No imports from Manchuria and Kwantung were reported.

2/ Includes, where available, imports into Korea and Formosa plus exports to Manchuria and Kwantung. It was not possible to convert exports to Empire areas to a milled-rice basis.

3/ Does not include Manchuria, for which data were not separately reported.

4/ Includes Manchuria and Kwantung, for which data were not separately reported.

5/ Exports to Korea and Kwantung. Data for Manchuria are not separately available; data for Formosa were not reported in 1939.

6/ An estimate of 2.9 million pounds, which includes both Korea and Formosa, is based on preliminary or incomplete data.

7/ Not available.

Source: U. S. Department of Agriculture, Agricultural Statistics; Vernon Dale Wickizer and M. K. Bennett, published in cooperation with the Institute of Pacific Relations (Grain Economics Series, No. 3) 1941. The Rice Economy of Monsoon Asia: Annual Return of the Foreign Trade of Taiwan (Formosa); Tables of Trade and Shipping of Chosen (Korea); Annual and Monthly Return of the Foreign Trade of Japan.

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1928	18,945	2,022	657	575	3,254	3/ 37	4/ 10	47	22,152	358
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5/ Exports to Korea and Kwantung. Data for Manchuria are not separately available; data for Formosa were not reported in 1939.

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Source: U. S. Department of Agriculture, Agricultural Statistics; Vernon Dale Wickizer and M. K. Bennett, published in cooperation with the Institute of Pacific Relations (Grain Economics Series, No. 3) 1941. The Rice Economy of Monsoon Asia: Annual Return of the Foreign Trade of Taiwan (Formosa); Tables of Trade and Shipping of Chosen (Korea); Annual and Monthly Return of the Foreign Trade of Japan.

About three-fifths of the total Japanese rice is grown by tenants, the landlord receiving his rent in grain.

#### Production

Rice is grown throughout Japan with the exception of the northern part of Hokkaido, and more than half of the arable land is planted in rice. During the decade before World War II the area planted to rice remained relatively constant; the annual average area during 1930-34 amounted to 7,887,000 acres, as compared with 7,866,000 acres during 1927-39. The cultivated land other than that in rice is more productive when planted to other crops. Any further expansion of the rice acreage in Japan is therefore unlikely because it would be at the expense of other crops and would be uneconomical. The variation in yearly production (in terms of milled rice) from a peak of 22.3 billion pounds in 1933 to a low of 16.3 billion pounds in 1934 was largely due to the changing yield per acre, as a result of variable climatic conditions. In 1939, production amounted to 22 billion pounds of rice (see table 2).

The high yields per acre in Japan are the result of greater use of improved varieties of rice and heavy applications of fertilizers. The chief commercial fertilizers used are fish products, vegetable-oil cakes, calcium phosphate, and ammonium sulphate. Through experimentation and subsidies, the Government has encouraged the process of fixation of atmospheric nitrogen for military and agricultural purposes. The decline of imports of soybean-oil cake has been largely due to the increase in the manufacture of ammonium sulphate.

Table 2.- Rice: Acreage and production in Japan, 1928-39

Year	Acreage	Production <sup>1/</sup>	Yield per acre
	1,000 acres	Million pounds	Pounds
1928	7,822	18,945	2,422
1929	7,848	18,763	2,391
1930	7,938	21,009	2,647
1931	7,962	17,346	2,178
1932	7,983	18,972	2,376
1933	7,778	22,251	2,861
1934	7,775	16,286	2,095
1935	7,852	18,050	2,299
1936	7,859	21,146	2,691
1937	7,877	20,835	2,645
1938	7,893	20,693	2,623
1939	7,823	21,665	2,769

<sup>1/</sup> In terms of milled rice.

Source: U. S. Department of Agriculture, Agricultural Statistics.



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# Imports

Imports of rice into Japan proper increased from an average of 3.3 billion pounds (14.9 percent of total consumption) during 1928-32 to 3.9 billion pounds (16.6 percent of total consumption) during 1933-37. In 1938 rice imports totaled 3.8 billion pounds, but fell in 1939 to 3.0 billion as a result of the short crops in Korea and Formosa. For the period 1933 to 1937 the value of imports annually averaged 323 million yen (more than 90 million dollars). In 1938 imports increased to 427 million yen, the highest value in many years. (See table 3.)

In the 1920's the Japanese Government initiated a program to make the Empire self-sufficient in rice. It was put into effect through the expansion of rice acreage, the development of more productive varieties, Government subsidies, and a tariff of 1 yen per 100 kin (132.3 pounds) on foreign rice, while colonial rice entered free of duty. Between 1920 and 1930 the proportion of Japan's rice imports supplied by foreign sources decreased from 36 to 22 percent (see table 4). By 1930 rice acreage and production in Japan proper had almost reached their peak; however, colonial production and exports of rice to Japan were further stimulated through price controls and increased subsidies as well as through increases in preference differentials. By the late 1930's only about 2 percent of Japan's rice imports were coming from non-Empire sources.

Table 3.- Rice and paddy: Value of imports <sup>1/</sup> into Japan proper, annual, 1928-39, and average, 1928-32, 1933-37

(In thousands of yen)						
Year	:	Value	:	Year	:	Value
1928	-----	267,065	:	1934	-----	320,488
1929	-----	214,721	:	1935	-----	342,737
1930	-----	163,651	:	1936	-----	371,083
1931	-----	183,978	:	1937	-----	355,291
1932	-----	217,809	:	Average,	:	
Average,	:		:	1933-37	-----	323,054
1928-32	-----	209,519	:	1938	-----	426,529
1933	-----	225,609	:	1939 2/	-----	151,548

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- <sup>1/</sup> Exports from Korea and Formosa to Japan plus imports into Japan from Manchuria, Kwantung, and all foreign sources.  
<sup>2/</sup> Does not include Formosa, for which data are not available.

Source: Official Japanese, Korean, and Formosan trade statistics.

Table 4.- Rice: Percent of total imports into Japan proper from various sources, averages, 1921-38

Period	Percent of total imports from--		
	Korea	Formosa	Non-Empire sources
1921-25	47	17	36
1936-30	57	21	22
1931-35	65	30	5
1936-38	63	35	2

Source: Wickizer and Bennett, The Rice Economy of Monsoon Asia.

Table 5 shows that the annual average imports of rice in 1935-37 from Korea amounted to 2.5 billion pounds (about 33 percent of production in Korea) and that those from Formosa amounted to 1.4 billion pounds (about 45 percent of production in Formosa). Total value of annual imports from both areas during 1935-37 averaged 318 million yen. The value increased to 424 million yen in 1938, although the quantity of exports was about the same. In 1938 rice imports represented about 45 percent of the value of all imports from Korea, and 30 percent of the value of those from Formosa.

The great increase in Japanese imports of rice from Korea and Formosa caused a serious decline in the per capita consumption of rice in both colonies despite their expanding production.

Imports into Japan proper from non-Empire countries have declined in importance and now consist almost entirely of broken rice from Thailand. Imports of broken rice from foreign areas decreased from an annual average of 306 million pounds in 1928-32 to 111 million in 1935-37, and were only 52 million pounds in 1939 (see table 6). Until 1935 Japan provided an important outlet for California rice, which is one of the varieties preferred by Japanese. Average imports from the United States during 1928-32 amounted to about 38 million pounds of broken rice and 17 million pounds of milled rice. With Japan placing greater emphasis on self-sufficiency of the Empire, imports of rice from the United States ceased after 1933.

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Table 5.- Rice: Imports <sup>1/</sup> into Japan proper from Korea and Formosa, by types, annual, 1928-40, average, 1928-32 and 1933-37

(Quantity in millions of pounds; value in thousands of yen)							
Year	Korea				Formosa <sup>2/</sup>		
	Uncleaned rice		Cleaned rice		Quantity <sup>5/</sup>	Value	
	Quantity <sup>3/</sup>	Value	Quantity <sup>4/</sup>	Value			
1928 -----	1,263.2	106,948	811.2	73,738	717.4	52,706	
1929 -----	1,049.2	87,525	653.4	58,108	653.0	46,306	
1930 -----	826.4	58,291	682.2	49,106	621.9	36,671	
1931 -----	1,480.7	75,314	1,185.2	60,844	901.6	40,849	
1932 -----	1,197.0	76,318	1,021.7	66,910	1,151.1	62,416	
Average, 1928-32 -----	1,163.3	80,879	870.7	61,741	809.1	47,790	
1933 -----	1,143.9	73,834	1,163.4	76,360	1,185.2	63,954	
1934 -----	1,628.0	121,084	1,291.3	98,539	1,575.4	100,204	
1935 -----	1,513.0	134,051	1,124.3	102,919	1,315.9	102,418	
1936 -----	1,331.3	122,430	1,272.1	122,307	1,481.9	121,248	
1937 -----	1,027.0	100,408	1,245.1	126,360	1,504.8	124,490	
Average, 1933-37 -----	1,328.7	110,361	1,219.2	105,297	1,412.6	102,463	
1938 -----	1,503.0	151,942	1,058.1	145,598	1,427.2	126,181	
1939 -----	547.8	59,193	747.4	86,069	6/	6/	
1940 -----	0.2	26	116.0	15,804	6/	6/	

1/ Exports reported by countries of origin (Korea and Formosa).

2/ Exports from Formosa include both rice and paddy (rice in the hull); between 90 and 95 percent of the total is paddy.

3/ Quantity converted at 1 koku = 315.0 pounds.

4/ Quantity converted at 1 koku = 319.89 pounds.

5/ Before 1933, reported in kin (1.3227 lb.); after 1933, reported in bags, converted at 1 bag = 1 picul (132.27 lb.).

6/ Not available.

Source: Tables of Trade and Shipping of Chosen (Korea); Annual Return of the Trade of Taiwan (Formosa).

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Table 6.- Broken rice: General imports into Japan,  
by principal foreign sources, 1928-39

Year	All countries	Principal countries				All other countries
		Thailand	French Indochina	United States		
Quantity (1,000 pounds)						1/
1928	324,769	280,368	6,918	36,141	1,322	
1929	329,388	282,250	225	46,874	39	
1930	321,111	285,534	13	35,492	72	
1931	266,049	229,557	-	36,492	-	
1932	290,334	254,915	-	35,413	6	
Average, 1928-32	306,330	266,529	1,431	38,082	286	
1933	290,974	279,319	-	11,655	-	
1934	-	-	-	-	-	
1935	77,566	77,566	-	-	-	
1936	116,934	116,867	67	-	-	
1937	68,930	68,863	67	-	-	
Average, 1933-37	110,881	108,523	27	2,334	-	
1938	50,011	49,900	111	-	-	
1939	2/ 52,087	-	-	-	-	
Value (1,000 yen)						
1928	15,583	12,727	343	2,457	56	
1929	17,844	14,006	10	3,225	3	
1930	14,997	12,738	1	2,254	4	
1931	6,529	5,258	-	1,271	-	
1932	10,129	8,389	-	1,729	1	
Average, 1928-32	13,516	10,745	71	2,187	13	
1933	10,474	9,893	-	581	-	
1934	-	-	-	-	-	
1935	2,986	2,986	-	-	-	
1936	4,830	4,827	3	-	-	
1937	3,760	3,757	3	-	-	
Average, 1933-37	4,410	4,293	1	116	-	
1938	2,804	2,798	6	-	-	
1939	2/ 2,519	-	-	-	-	

<sup>1/</sup> Converted from kin to pounds at 100 kin = 132.28 pounds.<sup>2/</sup> Country detail not available.Source: Annual and Monthly Return of the Foreign Trade of Japan.URL: <http://www.legal-tools.org/doc/f60369/>



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Exports

Exports of rice from Japan proper and Karafuto after 1928 never amounted to as much as 3 percent of either production or consumption and were less than 1 percent after 1931. Exports decreased from a yearly average of 134 million pounds valued at 9.4 million yen (4.2 million dollars) during 1928-32 to 115 million pounds valued at 8.6 million yen (2.5 million dollars) during 1933-37. This downward trend of exports was particularly noteworthy after 1935, and exports in 1938 were only 42 million pounds, valued at 4.9 million yen (1.4 million dollars). The decline has resulted primarily from the decrease in exports to non-Empire areas, and apparently indicates the effect of the Empire self-sufficiency program (see table 7).

Exports to Empire areas averaged 61 million pounds annually from 1928-37. Korea has received about 90 percent of these exports although it has been a large net exporter of rice to Japan. Exports to foreign areas went mainly to the Netherlands, Canada, Hawaii, and, to a lesser extent, the United States in the early 1930's; after 1935, the Netherlands, which formerly was the primary foreign market, took no rice at all from Japan.

Consumption

Total consumption of rice in Japan proper increased from an annual average of 22.1 billion pounds during 1928-32 to 25.5 billion for 1933-37; it was 24.5 billion in 1938 and at least that much in 1939. While apparent per capita consumption fluctuated between 300 and 385 pounds annually from 1928-39, actual per capita consumption probably was maintained at the average of about 340 pounds annually through the depletion or accumulation of stocks (see tables 1 and 8 and the section on Stocks).

Per capita rice consumption in Japan has surpassed that in all countries except British Malaya. However, in certain sections of southeastern China and in Assam the per capita consumption has exceeded 400 pounds, while that in Bengal and central China has approximated the Japanese figure. Despite its heavy consumption of rice, Japan proper is estimated to obtain only about 70 to 80 percent of all its food calories from cereals and starchy roots and tubers, while the other countries comprising Monsoon Asia obtain 80 to 90 percent of their food calories from such foodstuffs.

Preference is shown in most Asiatic countries for [PURI](http://www.legal-tools.org/doc/f60369/) of rice. In Japan, consumer preference is such that domestic rice commands the highest price, grade for grade, followed by rice from Formosa, Korea, and (when it was imported) California, while rice from such major exporting areas as Thailand and French Indochina receives the lowest price.

Table 7.- Rice and paddy: Exports from Japan proper and Karafuto, to Empire areas and foreign countries, annual, 1928-40, average, 1928-32 and 1933-37

Year	Empire areas					Foreign countries	Total, all areas
	Korea <sup>1/</sup>	Formosa <sup>1/</sup>	Manchuria	Kwantung	Total		
Quantity (1,000 pounds)							
1928	27,970	7,812	2/	1,460	2/ 37,242	2/ 9,696	46,938
1929	81,336	3,314	2/	1,625	2/ 86,275	2/ 8,622	94,897
1930	54,748	2,233	2/	20,619	2/ 77,600	2/ 105,074	182,674
1931	16,478	2,271	2/	29,338	2/ 48,087	2/ 390,138	438,225
1932	26,255	25,708	2/	2,033	2/ 53,996	2/ 101,291	155,287
Average, 1928-32	41,358	8,268	2/	11,015	2/ 60,641	2/ 122,964	183,604
1933	25,725	2/ 2,134	505	2,046	30,410	33,653	64,063
1934	48,655	2/ 2,106	1,279	6,815	58,855	137,553	196,410
1935	84,092	2/ 2,027	1,541	2,619	90,279	66,385	156,664
1936	56,610	2/ 1,977	1,709	1,933	62,229	19,272	81,501
1937	55,607	2/ 2,070	1,640	2,414	61,731	17,495	79,226
Average, 1933-37	54,138	2/ 2,063	1,335	3,165	60,701	54,872	115,573
1938	18,737	2/ 4,519	1,574	3,603	28,433	13,149	41,582
1939	109,013	4/	4/	13,002	4/	31,352	4/
1940	28,501	4/	4/	4/	4/	4/	4/
Value (1,000 yen)							
1928	2,089	534	175	2/	2/ 2,798	2/ 1,103	3,901
1929	6,370	350	181	2/	2/ 6,901	2/ 913	7,814
1930	3,920	220	1,014	2/	2/ 5,154	2/ 5,557	10,711
1931	810	162	1,118	2/	2/ 2,090	2/ 14,751	16,841
1932	1,528	1,528	174	2/	2/ 3,230	2/ 4,604	7,834
Average, 1928-32	2,943	559	532	2/	2/ 4,035	2/ 5,386	9,421
1933	1,513	174	176	42	1,905	1,906	3,811
1934	3,062	175	503	114	3,854	7,803	11,657
1935	7,023	205	287	163	7,677	4,776	12,453
1936	4,998	214	215	184	5,611	1,968	7,579
1937	4,910	227	282	163	5,582	1,861	7,443
Average, 1933-37	4,301	199	293	133	4,926	3,662	8,588
1938	2,110	519	453	198	3,280	1,614	4,894
1939	13,492	4/	1,764	4/	4/	4,062	4/
1940	4,628	4/	4/	4/	4/	4/	4/

<sup>1/</sup> Imports of country of destination.

<sup>2/</sup> Exports to Manchuria not separately reported during 1928-31; therefore, whatever exports occurred are included under foreign countries through 1932. In 1932 exports to Manchuria were separately reported and amounted to 276,000 pounds valued at 21 million yen.

<sup>3/</sup> Estimated on basis of 132.28 pounds (1 picul) to 1 bag of rice.

<sup>4/</sup> Not available.

Sources: Annual and Monthly Return of the Foreign Trade of Japan; Tables of Trade and Shipping of Chosen (Korea); Annual Return of the Trade of Taiwan (Formosa).

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Stocks

Stocks of rice at the beginning of the crop year (November 1) were unusually heavy during 1931-35, largely as a result of the Government program to support prices without controlling production. The peak year of stocks was that beginning November 1, 1934, when the carry-over amounted to 23 percent of the preceding crop. The carry-over on November 1, 1939, was only 6 percent of the preceding crop (see table 8).

Under ordinary conditions of storage in the Asiatic countries, rough rice is unfit for edible purposes after 6 or 8 months, and cleaned rice after only 3 to 4 months. In Japan, however, facilities are available for storing, ventilating, and fumigating rice and these permit rice to be stored for longer periods than in other countries.

In 1939, the summer drought greatly reduced the rice crop in Korea and Formosa, but only slightly reduced the production in Japan proper.

Table 8.- Rice (in terms of cleaned rice): Annual carry-over in Japan proper, 1928-39

Year (beginning November 1)	Carry-over Million pounds	Percent of preceding year's crop
1928	2,291	12.6
1929	2,052	11.7
1930	1,671	9.6
1931	2,670	13.7
1932	2,601	16.1
1933	2,630	14.9
1934	4,799	23.2
1935	2,901	19.2
1936	2,339	10.6
1937	2,194	11.2
1938	2,480	12.8
1939	1,186	6.2

Source: Wickizer and Bennett, *The Rice Economy of Monsoon Asia*.

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Government control.

The Japanese Government has tried several price control schemes since the end of World War I. The high prices and short crops following the war were the principal causes of the first rice law in 1921. The main object of this law was to encourage production in order to bring prices down for consumers and probably more important, to achieve self-sufficiency in rice. In 1925 a minor amendment to the law was made, and in 1931, another, of greater importance. Under the 1931 amendment a standard for price control was adopted which established upper and lower price limits. With certain exceptions, the Government was enabled to purchase rice only when the price was below the minimum or sell rice when the price was above the maximum. To the extent possible, the minimum price was determined by cost of production, and the maximum price by cost of living. This amendment resulted in marketing large quantities of rice immediately after harvest, thus depressing the price to minimum and requiring the Government to store large quantities.

To remedy this condition, the basic law of 1921 was repealed in 1933, and the Rice Control Act was passed, providing for a sliding scale of minimum prices each month to take into account storage and interest costs incurred by producers or marketing agents. Another feature of the act was the restriction of imports of rice and substitute foodstuffs by changes in import duties.

In 1936 the act was amended to require marketing agencies and cooperative associations to store part of the rice crop, thus relieving a burdensome carry-over which had been built up by the Government. In 1939 more drastic legislation, the Rice Distribution Control Law, was passed. A semi-official company called the Japan Rice Co., Ltd., was created to monopolize all rice markets of Japan. Speculation was prohibited, and prices were regulated by control of distribution.

In the fall of 1939, however, the rice situation showed a drastic change. The summer drought greatly reduced price production in Korea and, to a lesser extent, in Formosa, although the crop was good in Japan. The carry-over of rice amounted to only 6.4 percent of the preceding crop, or less than 50 percent of the average for the 3 previous years, and the Japanese were alarmed over a possible food shortage. The Government increased the "frozen price" from 38 to 43 yen per koku (about 315 pounds of brown rice) in November 1939, and to 46 yen per koku in 1940. Restrictions were imposed on the extent to which rice might be milled and on the use of rice for making sake. Mixing rice with barley

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By giving the producer a price higher than he otherwise would have received and selling to the consumer at a price lower than he otherwise would have paid, the Government operated at a loss. The losses sustained by the Government ranged from 200 million yen in 1921 to more than 1,000 million yen in 1934, when unusually large stocks were carried. This legislation gave some relief to farmers and consumers, but did not solve the problem of price control, largely because of a lack of production control or the inability to control it.



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Wartime supply

Virtually all reports from Japan have given optimistic accounts concerning the rice situation. They have stated that rice production in Japan proper has ranged from 21.1 billion pounds in 1942 to 19.6 billion in 1943 and 19.5 billion in 1944. These figures may be compared with averages of 19.0 and 19.7 billion pounds during 1928-32 and 1933-37, respectively. In addition, large surplus rice crops have been reported for Korea and Formosa, and Manchurian production is said to have expanded.

On the basis of these reports, the Japanese Empire appears to have maintained its self-sufficiency in rice. With almost the entire surplus-rice-producing area of southeastern Asia under Japanese control, large stocks probably have accumulated in the producing areas. However, shortages of fertilizers, the decrease of supplementary foodstuffs available in Japan proper, and wartime conditions in general (such as a shortage of shipping) may have increased the need for rice far beyond pre-war requirements.

Post-war problems

On the basis of its 1936-39 consumption, Japan would require annually the equivalent of about 25 billion pounds of cleaned rice in the post-war period. However, Japan's post-war needs may exceed that amount, particularly since in the long run it is probable that the total population will increase; besides, post-war restrictions on Japanese industry and commerce will likely reduce the foreign exchange available for obtaining the most costly supplemental foodstuffs once bought from abroad, and will result in an increase in per capita consumption. Japan proper apparently had reached its optimum rice crop acreage and yield. Its deficit in rice, therefore, will possibly exceed its 1936-39 average imports of about 3.4 billion pounds of cleaned rice.

The bulk of these imports might be expected to come from Korea and Formosa, both as a result of their proximity and the fact that they produce Japanese varieties of rice. However, Japan will not be able to apply the trade controls, price manipulations, and subsidies which were used in the pre-war period to secure rice from Korea and Formosa. In fact, a free Korea might well enforce economic controls to retain a larger portion of its rice production for consumption by its own people. The same situation may apply to Formosa, and, under Chinese control, any surplus rice production probably would be diverted to China's deficit areas. Japan evidently will have to obtain a much greater part of its rice requirements from such surplus-producing countries as French Indochina and Thailand. If Japan imports much more rice than formerly it will require several hundred million yen in exchange with which to purchase it.

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has an abundance of coal suitable for firing pottery, or for producing gas for this purpose, the fuel imported must have been oil for those few plants equipped to burn oil rather than any other fuel. Plants so equipped could, however, be converted readily to producer-gas fuel. Thus, in Japan, as in all of the major pottery producing countries, the industry is almost independent of imports of raw materials.

#### Production and employment.

Japanese production of pottery, table 2, declined from 75 million yen in the later 1920's to 54 million yen in 1931; then, with the depreciation of the yen and the effort to produce more goods for export in exchange for imports of war materials, production more than doubled in yen value, reaching 115 million yen by 1937. In 1938 total production declined to 100 million yen, about 15 percent below the 1937 level.

Table 2.- Pottery industry: Number of factories, number of workers, and output in Japan, 1929 to 1938

Year	Factories 1/	Workers	Pottery for domestic use 2/	Other pottery 3/	Total pottery
	In thousands	In thousands	Million yen	Million yen	Million yen
1929 ----	6.7	44.4	56.7	18.1	74.8
1930 ----	6.4	41.2	47.5	14.9	62.4
1931 ----	6.3	40.3	42.4	11.8	54.2
1932 ----	6.5	43.9	50.0	15.3	65.3
1933 ----	6.6	53.3	63.1	22.1	85.2
1934 ----	6.5	57.2	72.6	19.8	92.4
1935 ----	6.6	61.1	73.6	25.8	99.4
1936 ----	6.7	64.0	79.6	28.6	108.2
1937 ----	6.6	62.2	79.0	36.2	115.2
1938 ----	6.7	58.1	57.1	42.9	100.0

1/ Including those with less than 5 workers.

2/ Includes table and kitchen articles, art and decorative ware, toys, etc.

3/ Includes electrical, sanitary ware, and industrial pottery and floor and wall tile.

Source: Japan Yearbooks and Japan-Manchoukuo Yearbooks.

Table and kitchen articles constitute the majority of total pottery production, accounting for 50-60 percent of the value of products in the years 1929 to 1937. In 1938 this percentage dropped to 42 because of the institution in Japan in that year of a planned wartime economy. Under this Japanese program, whereas production of pottery for domestic

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Table 3 indicates the continuing effect that the devaluation of the yen has had on the price competition between Japanese table pottery and that produced in the United States.

By 1935, the price competition of Japanese products was countered in practically every important world market, except the United States, by the adoption of import restrictions aimed more or less directly at Japanese goods, including pottery.

#### Imports.

Japanese imports of pottery have been negligible.

Table 3.- Comparison of price indexes of United States and Japanese pottery tableware, 1929 to 1941

Year	: Yearly average :	Price index of :		Price index of :		Ratio of : (c) : to (d)
	: value of	Japanese pottery :		U. S. :		
	: yen in	: exports :		pottery :		
	: dollars	: In yen :	: In U.S. :	: (at factory) :		
	: (a)	: (b) 1/ :	: (c)	: (d) 2/ :	: (e)	
1929 -----	\$0.461	: 100	: 100	: 100	: 1.00	
1930 -----	.494	: 100	: 107	: 100	: 1.07	
1931 -----	.489	: 100	: 106	: 95	: 1.12	
1932 -----	.281	: 100	: 61	: 88	: .69	
1933 -----	.256	: 108	: 61	: 83	: .74	
1934 -----	.297	: 119	: 76	: 91	: .84	
1935 -----	.287	: 119	: 74	: 100	: .74	
1936 -----	.290	: 119	: 75	: 103	: .73	
1937 -----	.283	: 122	: 76	: 108	: .70	
1938 -----	.285	: 128	: 79	: 108	: .73	
1939 -----	.260	: 128	: 72	: 108	: .67	
1940 -----	.234	: 134	: 68	: 111	: .61	
1941 -----	.234	: 157	: 80	: 120	: .67	

1/ Calculated for 1929 to 1934 from information in U. S. T. C. Report No. 102, Second Series, Pottery, Washington, 1936; for 1935 to 1939 from information obtained from consular reports, and for 1940 and 1941 from price increases reported in the Pottery Gazette, London, September 1940.

2/ Based on information in U. S. T. C. files and Bureau of Labor Statistics data for 1929 to 1935, and in Office of Price Administration release PM 3029 (April 22, 1942) for 1936 to 1941.

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#### Exports.

Total exports of pottery from Japan, including those to Korea and Formosa, declined from 38 million yen or 50 percent of production in 1928 to 27 million yen or 41 percent of production in 1932; exports

The United States was by far the most important market for Japanese exports of pottery for domestic use, taking an average of 16 million yen annually or about 40 percent of the total of such exports in the years 1934-38. No other country took more than 8 percent of such exports in any of these years. Asia and Oceania combined took about the same value as did the United States, and the remaining exports of domestic pottery were divided, more or less equally among Africa, Canada, Europe and Latin America. Japan supplied, in 1937, approximately 36 percent by value of the world markets for table and kitchen pottery; Japan's share of the various import markets supplied were Europe, 9 percent; Africa, 35; Asia, 77; Oceania, 42; the United States and Canada, 45; and Latin America, 33 percent (see table 6).

Table 6.- Table and kitchen pottery: Japanese exports by major areas in 1937

Import markets	Value	Percent of exports to all markets	Percent of import market supplied
	1,000		
	dollars 1/		
Europe -----	780	7	9
Africa -----	990	8	35
Asia -----	2,320	20	77
Oceania -----	1,850	16	42
United States and Canada -----	4,870	40	45
Latin America -----	1,070	9	33
Total -----	11,880	100	36

1/ Based on 1937 exchange rate of \$0.288 per yen.

Source: Pottery Tableware, United States Tariff Commission War Changes in Industry Series, Report No. 7, Washington, December 1944.

Japanese exports of pottery other than for domestic use, which, prior to 1938, accounted for about 10 percent of total Japanese pottery exports, have gone chiefly to Asiatic countries. In the years 1934-37 British India, China, Kwantung, and Manchuria combined took 65-75 percent of such pottery. In 1938-39 exports of pottery other than for domestic use accounted for about 20 percent of Japanese pottery exports and in 1938, the last year for which country details are available, such were valued at 5 million yen, or about 70 percent of this class of pottery exports, went to Kwantung, Manchuria, and China combined. The change in character and distribution of pottery exports was due, no doubt, to the institution, in 1938, of a planned wartime economy in Japan, and the building up of war industries in the Japanese-controlled portions of the continent of Asia. 1/

1/ As stated in a previous section, the Japanese pottery industry is under rigid control, not only of a manufacturers' federation, but also of an exporters' federation, which sets export prices and quotas, and regulates packaging and procedural forms.



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Japanese pottery exports to Korea and Formosa may be estimated from the import statistics of these areas. On this basis the value of Japanese pottery exports to Korea appear to have increased from 2.9 million yen in 1928 to 12.1 million yen in 1939; the value of such exports to Formosa during the same period rose only slightly. (See table 7.)

Table 7.- Pottery imports into Korea and Formosa from Japan, 1928-39

Year	Imports from Japan	
	Into Korea	Into Formosa
	1,000 yen	1,000 yen
1928	2,905	1/
1929	2,916	1,185
1930	2,248	1,100
1931	2,076	915
1932	2,340	1,191
Average, 1928-32	2,497	1,100
1933	2,908	1,388
1934	3,933	1,268
1935	5,279	1,481
1936	5,648	1,542
1937	6,563	1,551
Average, 1933-37	4,866	1,466
1938	8,809	1,621
1939	12,162	1/

1/ Not available.

Source: Tables of the Trade and Shipping of Korea; Annual Return of the trade of Formosa.

If Japan should, for any reason, lose a portion of her large North American and Oceanic market for pottery, there would be surplus capacity in her industry with which she could supply a considerable quantity of such ware to Chinese and other Asiatic markets in partial payment for war damage. Before the war the Asiatic market for domestic pottery was small probably because the people, having little money, bartered for such ware as could be obtained locally. Most of the countries required little pottery for other than domestic use because of their relatively meager industrialization.

#### Consumption.

The value of all classes of pottery consumed in Japan proper increased from an average of 34.7 million yen annually during 1928-32, to 55 million yen in 1936; it declined in 1937-38 to about 50 million yen. In terms of value consumption ranged from 45 to 60 percent of production.

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## FOREWORD

This is one of a series of Special Industry Analyses discussing from a commodity or individual industry viewpoint the outstanding items entering into the trade of Japan proper with its Empire and with foreign countries. These analyses are a part of a larger project which includes compilations (annotated) of the imports and exports of Japan proper by sources and destinations; surveys of certain of the colonial areas, emphasizing their Empire and foreign trade and postwar problems relating thereto; an over-all study of the trade of Japan proper; and a survey of Japan's shipbuilding industry and shipping services and requirements in the prewar period. In all of the studies Manchuria has been included as an Empire area owing to the political, economic, and military dominance of Japan in that area, especially during the last decade.

Most of the data in these analyses were taken from official and semi-official Japanese sources. Not only have errors and inconsistencies frequently been detected within individual volumes but many data from different sources supposedly reporting on the same subject are irreconcilable. It is very likely that large shipments of goods reportedly moving to Kwantung from Japan have been in large part merely transshipments destined for Manchuria.

The present report is one of a number which were prepared during 1944 and 1945 for the Foreign Economic Administration by members of the staff of the United States Tariff Commission. Owing to the desire of the Foreign Economic Administration to obtain this material as promptly as possible, the reports were not reviewed by the Tariff Commission. All statements of fact or opinion in these reports are attributable to the individual staff members who prepared them. The reports were originally intended for confidential use of Government agencies, but are now being made public with the consent of the Foreign Economic Administration.

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In the postwar period, exports of toys from Japan may again attain considerable volume. Perhaps the principal deterrent of the Japanese export trade in toys immediately after the war will be the adverse sentiment in the United States and the United Kingdom; in time, however, this antipathy may be expected to subside. With respect to Asiatic outlets, it is doubtful whether China, Southeast Asia, and other low-income areas would provide sizable markets for Japanese toys because the low purchasing power of the population precludes expenditures for appreciable quantities of such luxury items as toys.

#### Description and uses

Japanese toys are made of a great many materials in a wide and ever-changing variety of designs. The principal materials used in their manufacture, based on the value of the finished products, have been metal, celluloid, rubber, wood, paper, porcelain and pottery, fabrics, glass, bamboo, furs, and shell.

Japan produces virtually every type of toy. Many Japanese toys are manufactured on special orders placed by foreign buyers in accordance with samples submitted. Toys produced for the local market differ in both design and color from those produced for export.

Metal toys are largely mechanical and consist of such items as miniature airplanes, automobiles, locomotives, tanks, and wheel goods. Toys of celluloid and rubber include various kinds of dolls and animals. Other types of toys manufactured in substantial quantities include rubber balls and balloons, and toy musical instruments.

#### Production

Data covering the production of toys in Japan are incomplete inasmuch as official statistics cover only the output of factories employing more than five workers each, whereas a large part of the total product is manufactured in domestic workshops and is not recorded. For this reason export statistics furnish a more reliable indication of output than production statistics. The degree of incompleteness of available production figures is shown clearly by a comparison of production and export data. During the period 1933-37, for example, the reported value of output averaged about 13 million yen, and the value of exports averaged 339 million yen; reported production, therefore, amounted to only a little more than one-third of the exports during that period (see table 1).

The relative importance of some of the various materials used in the manufacture of Japanese toys is shown in table 1. Since 1934 the greater proportion of the toys has been made of metal; exports of metal toys since that year have represented about one-fifth of total exports of toys. The proportion of total exports of toys accounted for by rubber toys declined from 22 percent in 1928-32 to 17 percent in 1933-37, and fell still further to about 10 percent in 1937-39. Exports of celluloid toys increased from 12.0 percent of the total in 1933 to 18.0 percent in 1937.



Table 1.- Toys: Comparison of reported output <sup>1/</sup> and exports <sup>2/</sup> of Japan proper by types, 1928 to 1939 and averages, 1928-32, 1933-37

(In thousands of yen)

Year	Rubber		Celluloid		Metal		Wooden		Paper		Porcelain		All other		Total	
	Output	Exports	Output	Exports	Output	Exports	Output	Exports	Output	Exports	Output	Exports	Output	Exports	Output	Exports
1928	2,517	1,934	1,724	4,230	822	1,352	3/	498	187	1/	202	411	-	2,576	5,451	11,001
1929	2,318	2,161	2,026	5,573	985	1,869	3/	600	206	3/	83	406	-	3,246	5,618	13,855
1930	2,314	2,049	1,757	4,423	1,111	1,478	395	599	162	3/	223	419	-	2,771	5,962	11,699
1931	3,320	2,199	861	3,041	802	1,461	325	450	309	3/	123	258	2	2,415	5,742	9,824
1932	5,027	5,507	1,041	2,528	1,171	2,492	380	1,189	118	3/	113	298	-	3,105	7,850	15,119
Average, 1928-32	3,099	2,770	1,482	3,959	978	1,730	3/ 367	699	197	3/	149	358	5/	2,824	6,125	12,300
1933	5,963	8,633	2,627	3,178	1,701	5,156	584	2,555	127	3/	246	573	3	6,280	10,890	26,375
1934	3,548	6,406	1,636	3,708	2,457	7,802	1,220	3,506	457	1,886	538	1,032	1	6,046	9,857	30,386
1935	4,639	4,195	1,976	6,065	2,989	7,138	1,360	4,248	350	2,754	642	3,208	-	6,244	11,936	33,852
1936	4,984	4,641	1,990	6,538	3,711	8,383	1,590	4,130	492	3,248	1,925	2,521	1	7,198	14,493	36,499
1937	5,024	4,279	3,408	7,606	6,188	9,043	1,510	4,972	925	3,917	867	3,411	90	9,067	18,012	42,295
Average, 1933-37	4,747	5,631	2,328	5,379	3,409	7,504	1,213	3,882	470	3/ 2,951	844	2,149	19	6,967	13,030	33,873
1938	4,864	2,197	1,833	4,841	3,763	15,166	1,510	3,107	758	2,057	1,004	2,132	-	5,491	13,732	24,991
1939	3/	2/ 2,383	3/	2/ 4,510	3/	2/ 3,729	3/	2/ 2,387	3/	2/ 1,713	3/	2/ 1,791	3/	5,507	3/	22,020

<sup>1/</sup> Output of factories employing 5 or more persons.

<sup>2/</sup> Does not include exports to Korea, not separately classified in Korean trade annals. Exports to Formosa are not available by types and are included only in "all other" and "total" columns.

<sup>3/</sup> Not available.

<sup>4/</sup> Average 1930-32.

<sup>5/</sup> Less than 500 yen.

<sup>6/</sup> Average 1934-37.

<sup>7/</sup> Not including exports to Kwantung, not available in 1939.

Source: Output—Japan Handbook Yearbook; exports—Monthly and Annual Returns of the Bureau Trade of Japan and Formosa, Tables of the trade and shipping of Korea.

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workshops. Thus, because of effective organization, the small producing units share in the economies that attend large-scale buying, marketing, and financing.

In recent years considerable progress has been made toward the mechanization of production processes in the manufacture of metal toys. The greater part of the Japanese metal toys is now turned out in factories on a mass production basis at a relatively low price (see table 1).

Trade reports indicate that official assistance in research is given toy makers by the Japanese Government with a view to improving the product and cutting production costs. There are numerous toy manufacturing and export associations in Japan which have as their purpose the facilitating of production and trade.

As a result of the dominance of household producers in the manufacture of toys in Japan, the industry is distributed throughout the country; the largest manufacturing centers, however, before the war were Tokyo, Aichi, Osaka, Kyoto, and Nagoya.

In general Japanese toys packed for shipping were relatively bulky; the space required was fairly large in relation to the number and value of the toys shipped, but was inconsequential compared to total cargo space available. The toy trade was highly seasonal and shipments were heaviest in autumn months in anticipation of Christmas demand.

Exports

Exports of toys from Japan increased in value from 12.3 million yen in 1928-32 to 34 million yen in 1933-37. The increase in exports resulted from a number of factors, including the devaluation of the yen in 1931, an improvement in the quality of Japanese toys, and a decline in demand for German toys because of sentiment against the Nazi regime. The increase in the quantity of toy exports was somewhat less than that in value, however, because of the rising price level in Japan during the latter part of the 1930's.

The United States and the United Kingdom have been the principal markets for Japanese toys; British India, Australia, Netherlands India, Canada, and The Union of South Africa have been less important markets. During the period 1928-32 exports of Japanese toys to the United States accounted for 32 percent of the total, and to the United Kingdom 13 percent. During 1933-37 the United States purchased 34 percent of the Japanese toy exports and the United Kingdom 15 percent. Empire areas have not been important markets for Japanese toys <sup>1/</sup> (see table 2).

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<sup>1/</sup> Total exports of toys to Manchuria, Kwantung, and Formosa averaged 1,369,000 yen annually during 1936-38; these countries ranked about equal in importance as markets. Comparable data are not available for other years.

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In 1938 Japanese toy exports declined to 25.5 million yen, and further in 1939 to 22 million yen. The extent of the actual drop in exports of toys from Japan in the years immediately preceding World War II is not apparent from statistics because of the rapid advance in prices, but it has been estimated that the volume declined at least 70 percent. Japan's military activities were responsible in large measure for the reversal in the toy industry. Raw materials became increasingly difficult to obtain, a shortage of labor developed, and costs of production rose until American buyers were unable to realize a satisfactory margin of profit. Restrictions placed upon the use of metal, celluloid, and rubber proved a serious obstacle to the industry (see table 2). As political conditions became more uncertain and adverse sentiment in the American and British markets grew, Japanese exports declined still further.

Many Japanese firms ceased production of export goods, shifting to the production of articles for the home market; a number of manufacturers of metal toys turned to the production of toys of noncritical materials, munitions, or metal parts for war equipment.

#### Imports

Imports of toys into Japan are not reported separately in statistics, but are known to be negligible. It is believed that almost all imported toys are used as samples for duplication purposes.

#### Consumption

Demand for toys in Japan is supplied almost entirely by domestic production. Sales of toys for the several festivals that occur throughout the year for children are reported to be considerable. Domestic consumption, however, is relatively unimportant compared to exports.

Table 2.- Toys: Exports of domestic produce from Japan, by principal markets, 1928-39

Year	All countries	Principal countries								All other countries (by subtraction)
		United States	Great Britain	British India <sup>1/</sup>	Australia	Canada	Netherlands	Union of South Africa <sup>2/</sup>	Empire areas <sup>2/</sup>	
(In 1,000 yen <sup>4/</sup> )										
1928	11,001	3,671	935	1,277	460	282	569	87	5/ 404	3,316
1929	13,855	4,632	1,264	1,413	474	399	754	149	5/ 483	4,187
1930	11,699	3,470	1,678	1,069	350	400	665	132	5/ 335	3,600
1931	9,824	2,922	2,100	711	208	406	594	89	5/ 191	2,603
1932	15,119	4,987	2,288	1,466	861	508	804	116	5/ 234	3,855
Average 1928-32	12,300	3,936	1,673	1,187	471	399	677	115	5/ 329	3,513
1933	26,375	6,976	4,054	3,809	1,812	410	1,324	391	5/ 556	6,443
1934	30,386	9,604	4,605	3,063	1,766	627	1,046	866	5/ 621	8,188
1935	32,852	11,494	4,877	2,751	2,010	758	851	645	5/ 808	9,658
1936	36,922	13,689	5,916	2,784	2,137	1,081	959	891	6/ 1,203	8,262
1937	42,770	16,521	7,036	2,787	2,276	1,669	1,132	1,067	6/ 1,337	8,945
Average 1933-37	34,061	11,657	5,298	3,039	2,000	909	1,182	772	7/ 905	8,299
1938	25,506	6,043	5,504	1,715	2,187	1,262	500	638	6/ 1,567	6,040
1939	22,020	7,068	2,979	1,402	1,738	897	804	600	8/ 872	5,660

<sup>1/</sup> Includes Ceylon prior to 1934 and Burma prior to 1938.

<sup>2/</sup> Classified as Cape Colony and Natal prior to 1934 and as Federation of South Africa from 1934-37.

<sup>3/</sup> Imports into Korea are not separately classified.

<sup>4/</sup> Quantity not reported.

<sup>5/</sup> Manchuria and Kwantung only.

<sup>6/</sup> Manchuria, Kwantung, and Formosa.

<sup>7/</sup> See above for areas included.

<sup>8/</sup> Manchuria only.

Source: Compiled from official annual and monthly trade statistics of Japan, Korea, and Formosa.